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EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 05/08/2002

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/341,635

Applicant(s)

FERREIRA ET AL.

Examiner

Norca L. Torres-Velazquez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-22 is/are pending in the application.
- 4a) Of the above claim(s) 18-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

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DETAILED ACTION

1. The indicated allowability of claims 5 and 11-17 is withdrawn in view of the newly discovered reference(s) to HOLM et al. (US 5,958,186) and RICHTER (US 1,956,045).

Rejections based on the newly cited reference(s) follow.

2. Cancellation of claim 1 is acknowledged.

3. Newly submitted claims 18-22 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the method provides unpulped natural fiber bundles to form a nonwoven web material, while the product requires unpulped long natural fiber bundles and a pulp fiber component.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 18-22 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16 recites the limitation "the nonwoven material of claim 1" in line 2. There is insufficient antecedent basis for this limitation in the claim. Claim 1 has been cancelled. ✓

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Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 2-3 and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by RICHTER (US 1,956,045).

RICHTER discloses a waterlaid web of preliberated but substantially unbleached cellulose fibers made up in part of wood pulp and in part of longer-fibered pulp of the nature of manila and sisal. (Refer to claim 1) The reference also discloses a waterlaid web of preliberated but substantially unbleached cellulose fibers blended with asbestos fibers. (Refer to claim 4)

8. Claims 2-7, 11-13, 15 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by HOLM et al. (US 5,958,186).

HOLM et al. discloses a nonwoven material produced by hydroentanglement of a wet-laid web. The material comprises a mixture of short plant fibres, in particular pulp fibres, and

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long hydrophilic plant fibres, where the major portion of the fibres presents a fibre length which is at least 10 mm. (Abstract) The long plant fibres may be constituted by all types of leaf fibres. Examples of leaf fibres are abaca. The invention implies that a fibre web comprising a mixture of pulp fibres and long hydrophilic plant fibres is wet-laid. (Column 2, lines 16-40)

The reference further discloses the use of synthetic or regenerated staple fibers, e.g. polyester, polyamide, polypropylene, rayon, or the like. (Column 1, lines 21-25) HOLM et al. further teaches that in order to achieve high material strength, a mixing-in of fibres, which are longer than the pulp fibres, is required. It is therefore common to mix in a certain proportion of synthetic or regenerated staple fibres. (Column 1, lines 36-39) According to WO 91/08333, hydrophobic plant fibres can be wet-laid and bound by means of hydroentanglement, resulting in a hydrophilic nonwoven material. In this case the hydrophobic fibres maintain a large part of their bending stiffness during the wet-laying process, which allows a comparatively uniform fibre formation. (Column 57-62) The reference further discloses that after hydroentanglement, the material is pressed. (Column 2, line 65).

Regarding claims 15 and 17, the prior art is found to disclose each chemical and structural feature instantly claimed, therefore it must meet the property requirement specified, otherwise, applicant's claim is incomplete. Note ex parte SLOB (157 USPQ 172) which supports this position.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 8-10, rejected under 35 U.S.C. 103(a) as being unpatentable over HOLM et al. as applied to claims 3-7, 11-13, 15 and 17 above.

It is noted that HOLM et al. is silent with respect to the claimed basis weight and elasticity. It would be obvious to optimize the basis weight and elasticity depending on how much strength is wanted in the material.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over HOLM et al. as applied to claims 3-7, 11-13, 15 and 17 above, and further in view of JOHANSSON et al. (US 6163943).

HOLM et al. fails to teach the use of a spunbonded web in the composite.

JOHANSSON et al. disclose a method of producing a nonwoven material by hydroentangling a fiber mixture containing continuous filaments and natural fibers and/or synthetic staple fibers. (Abstract) The reference cites EP-A-0 308 320 in which, it is known to bring together a web of continuous filaments with a wetlaid fibrous material containing pulp fibers and staple fibers and hydroentangle together the separately formed fibrous webs to a laminate. (Column 1, lines 38-41)

Since both HOLM et al. and JOHANSSON et al. are from the same field of endeavor, the purpose disclosed by JOHANSSON et al. would have been recognized in the pertinent art of HOLM et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the composite material and provide it with a web of continuous filaments (such as a spunbonded web) with the motivation of producing a laminate in which the

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fibers of the different fibrous webs will not be integrated with each other as disclosed by JOHANSSON et al. (Column 1, lines 42-45).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 703-306-5714. The examiner can normally be reached on Monday-Thursday 7:30-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

nlt
May 1, 2002



TERREL MORRIS
SUPERVISORY PATENT EXAMINER
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